

COMPUTATIONALLY EFFICIENT MEANS FOR OPTIMAL CONTROL WITH CONTROL CONSTRAINTS

ABSTRACT

A method and system that reduces undesired vibration in a vehicle measures ambient vibration and generates a first command signal based upon said vibration measured in said step a. If a first component of the first command signal exceeds a maximum allowable, the first component of the first command signal must be constrained. A residual vibration resulting from the constraint of the first component is then calculated. A second command signal to compensate for said residual vibration is then calculated. Force generators are then activated based upon the constrained first component and the second command signal in order to reduce the vibration.

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